

Bound Brook and South Bound Brook, New Jersey Pedestrian and Bicycle Travel Plan



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Outline

- 
- Background Research Overview
 - Walkability Assessment Overview
 - Key Intersections/Priority Areas
 - Placemaking and Public Input
 - Implementation & Policy Actions
 - Funding Resources
 - Q&A and Next Steps

Background Research Overview



STUDENT TRAVEL TALLIES
EXISTING SCHOOL DISTRICT POLICY
CRASH ANALYSIS



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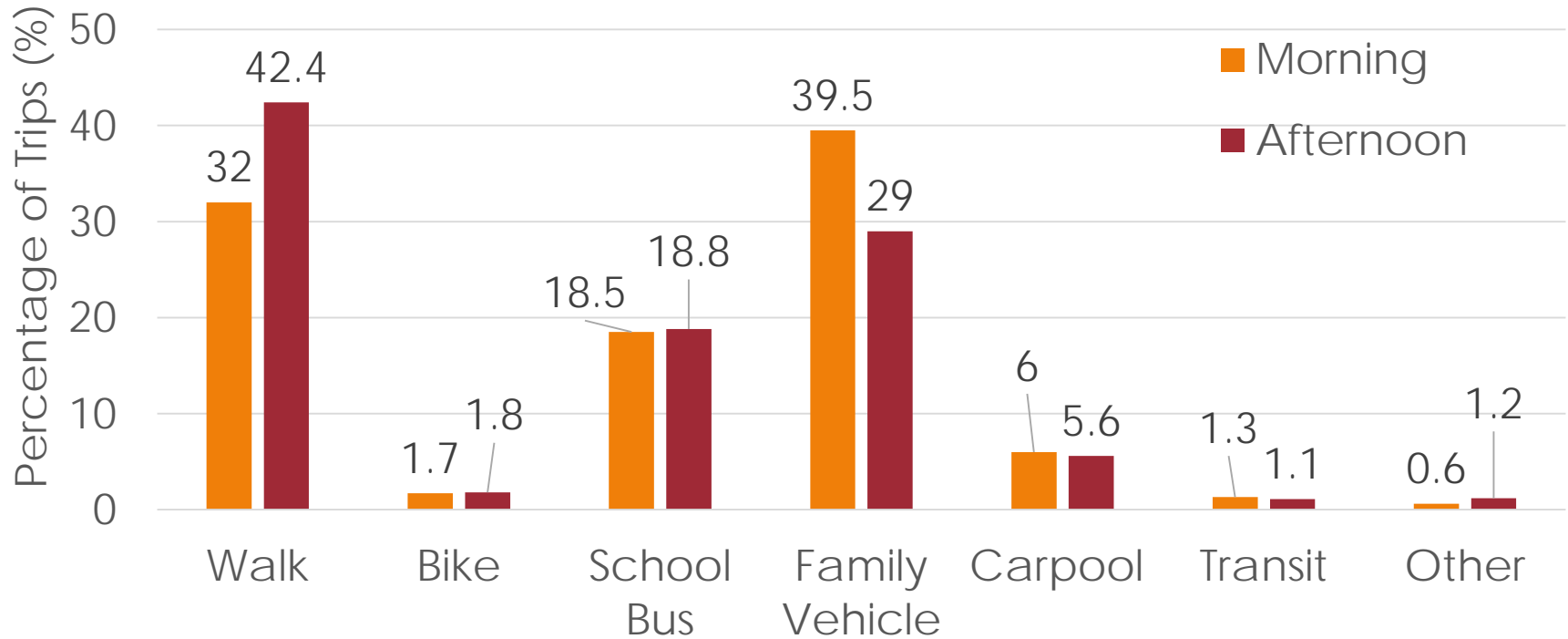
Quick Facts



At least 30% of student ***walk*** to school
in both Bound Brook or South Bound Brook

Less than 5% of student ***bike*** to school
in both Bound Brook or South Bound Brook

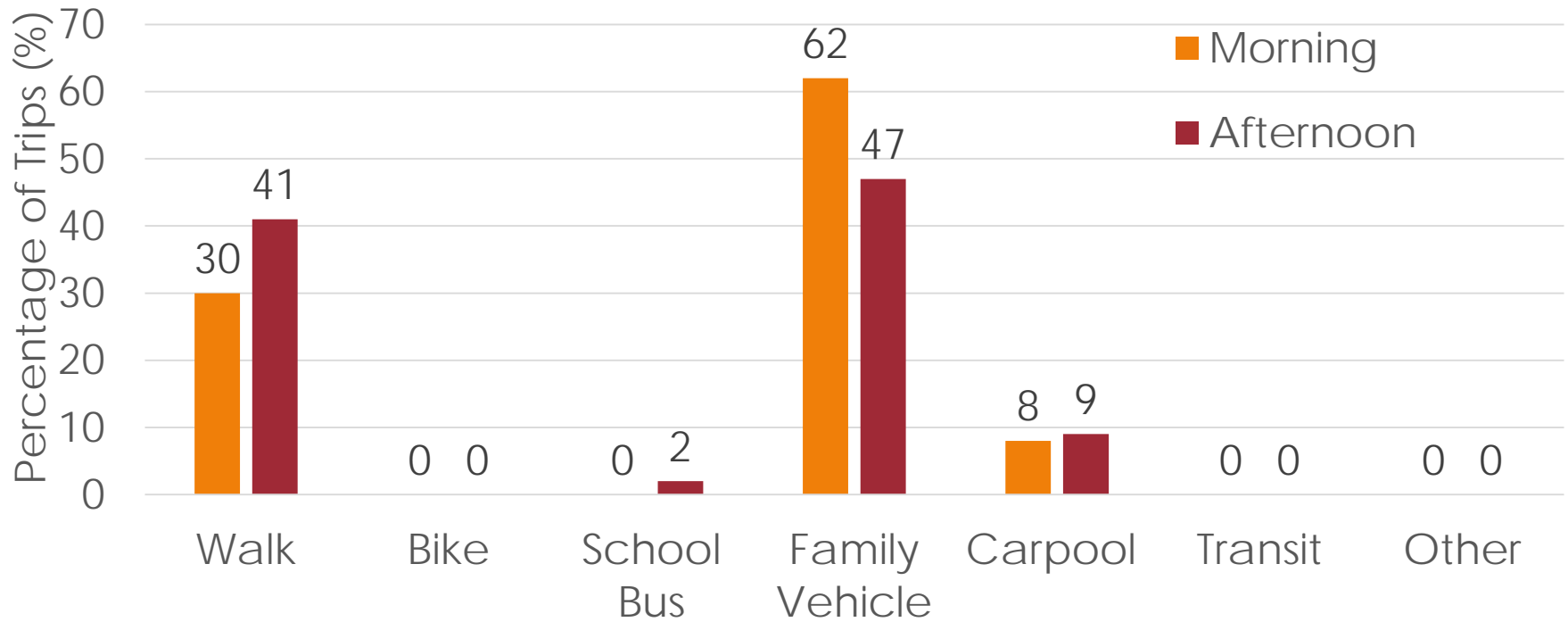
Student Travel Tally - Bound Brook



Source: Voorhees Transportation Center

October 2017

Student Travel Tally – South Bound Brook



Source: Voorhees Transportation Center

January 2018

Bound Brook School District Policy (1)



- **Student Use of Vehicles on School Grounds (5514)**
 - Outline student bicycle uses
 - Students must comply with state and local laws
 - Student must park bikes in a designated area outside school building
- **Walking and Biking to School 5514.5**
 - Students under 17 must wear helmets
 - Students in grades K – 3 walk with adult supervision.
 - Students should wear bright and reflective clothing



Bound Brook School District Policy (2)



- **District Sustainability Policy (7461)**
 - Incorporate Safe Route to School Program
 - Bike and walk to school where it is safe and to make it safe where it is not safe
 - The Board of Education will collaborate with municipal, county, and state agencies to build a safe, accessible, and convenient pedestrian and bicycle routes to and from school.



Source: New Jersey Safe Routes to School Program Strategic Plan Update (November 2012)

Bound Brook School District Policy (3)



- **Bound Brook Student Expectation Manuals**
 - **Bound Brook High School**
 - ✦ “Walk on sidewalks”
 - **Bound Brook Elementary School**
 - ✦ prohibit scooters and skateboards
 - **Bound Brook Middle School**
 - ✦ Stay in designated areas and on walkways
 - ✦ Keep hands and feet to yourselves
 - ✦ Pay attention to your surroundings
 - ✦ Be respectful of community members
 - ✦ No skateboarding or bicycle riding on school grounds

South Bound Brook School District

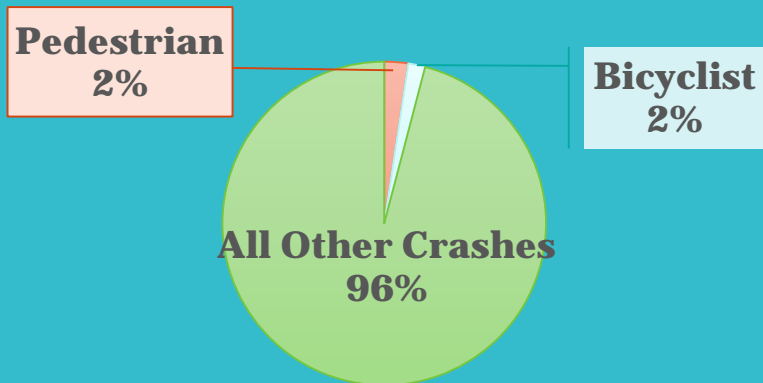


- **Robert Morris School –**
 - **School Bicycling Policy**
 - ✦ Bicycle riding to school is permitted for students with consent of their parents.
 - ✦ The school is not responsible for theft or damage.
 - ✦ Scooters and skateboards are not permitted.
 - **School Arrival Policy**
 - ✦ Student should arrive school between 8:16 to 8:30 am
 - ✦ No supervision before 8:16 am



Crash Analysis (2012 -2016)

Bound Brook



Year	2012	2013	2014	2015	2016
Pedestrian	5	6	7	10	7
Bicyclist	4	11	4	2	4
Total	9	17	11	12	11

Severity	Pedestrian	Bicyclist
Fatality	1	0
Injury	33	25
Property Damage Only	1	0
Total	35	25

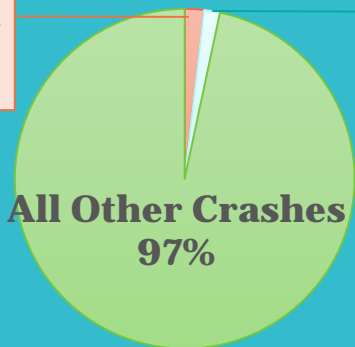
Crash by Time of Day



Crash Analysis (2012 -2016)

South Bound Brook

Pedestrian
2%



Bicyclist
1%

Year	2012	2013	2014	2015	2016
Pedestrian	1	1	1	0	3
Bicyclist	0	1	1	1	2
Total	1	2	2	1	5


Severity	Pedestrian	Bicyclist
Fatality	0	0
Injury	6	2
Property Damage Only	0	3
Total	6	5


Crash by Time of Day





Crash Location Bound Brook


Legend

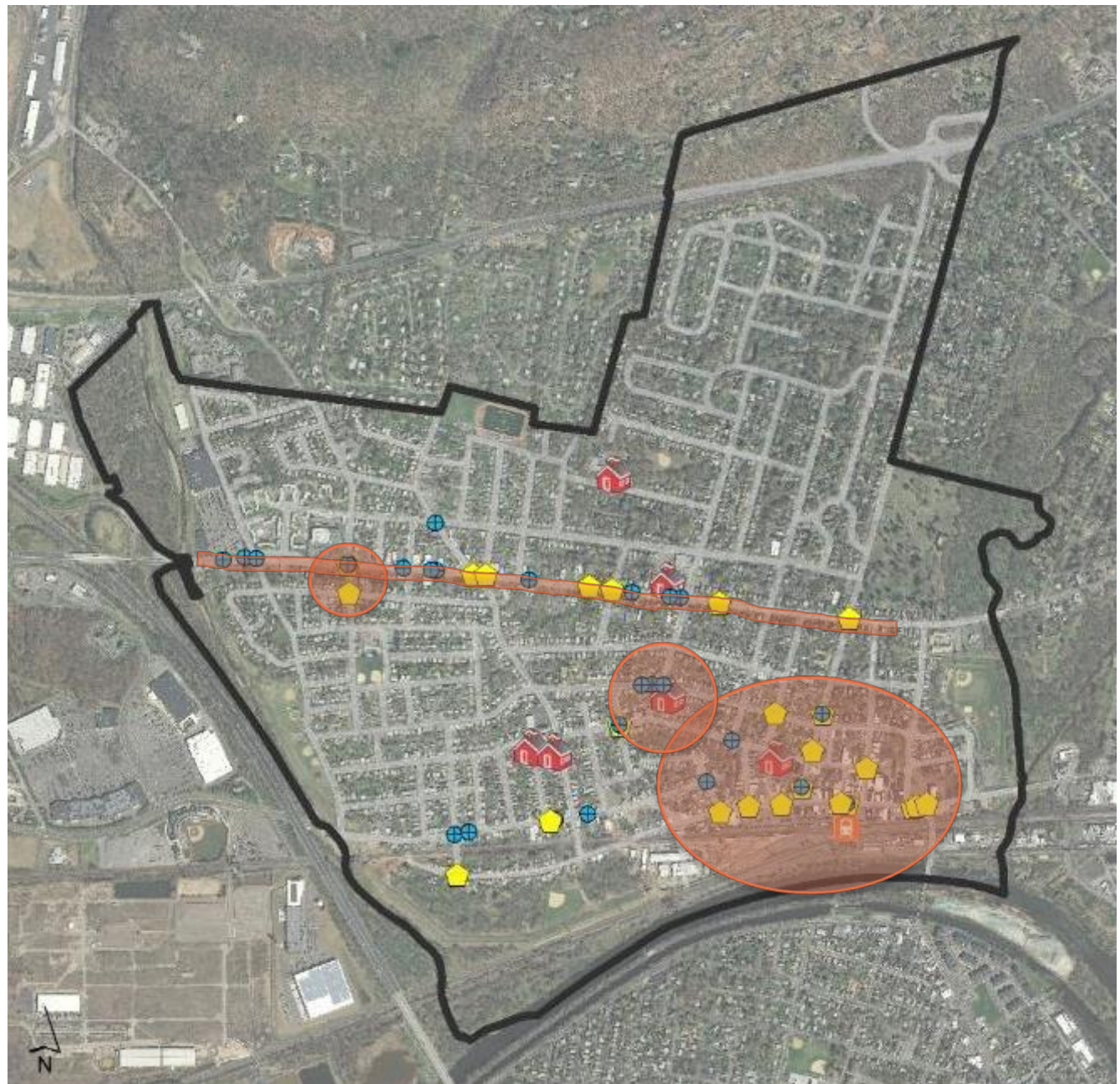
 Pedestrian Crash

 Bicyclist Crash

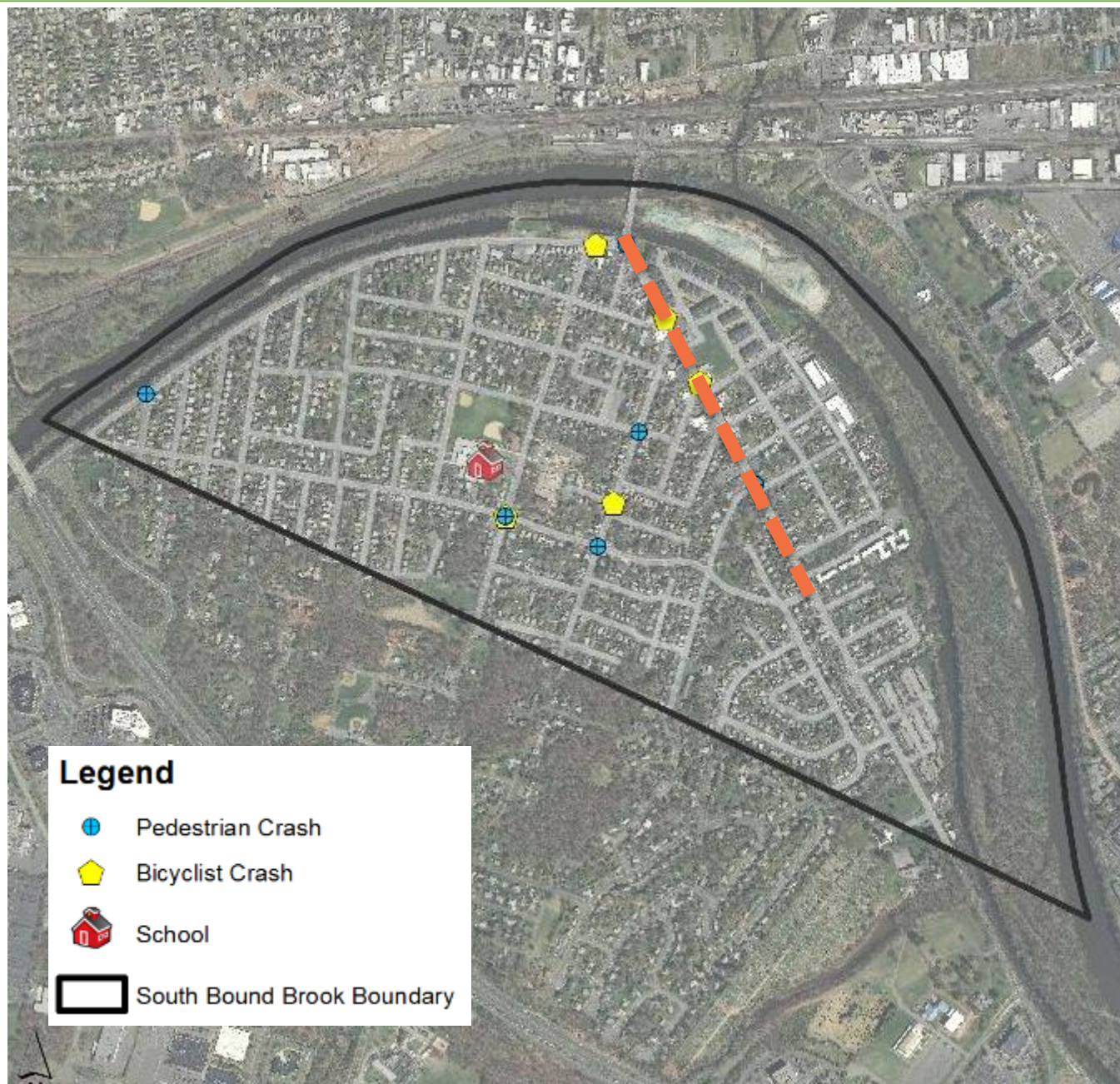
 School

 Train Station

 Bound Brook Boundary



Crash Location South Bound Brook



***How to provide
a better biking and walking environment?***

Walkability Assessments

- **Route selection**
- **General observations**
- **Site specific concerns**
- **Common concerns**

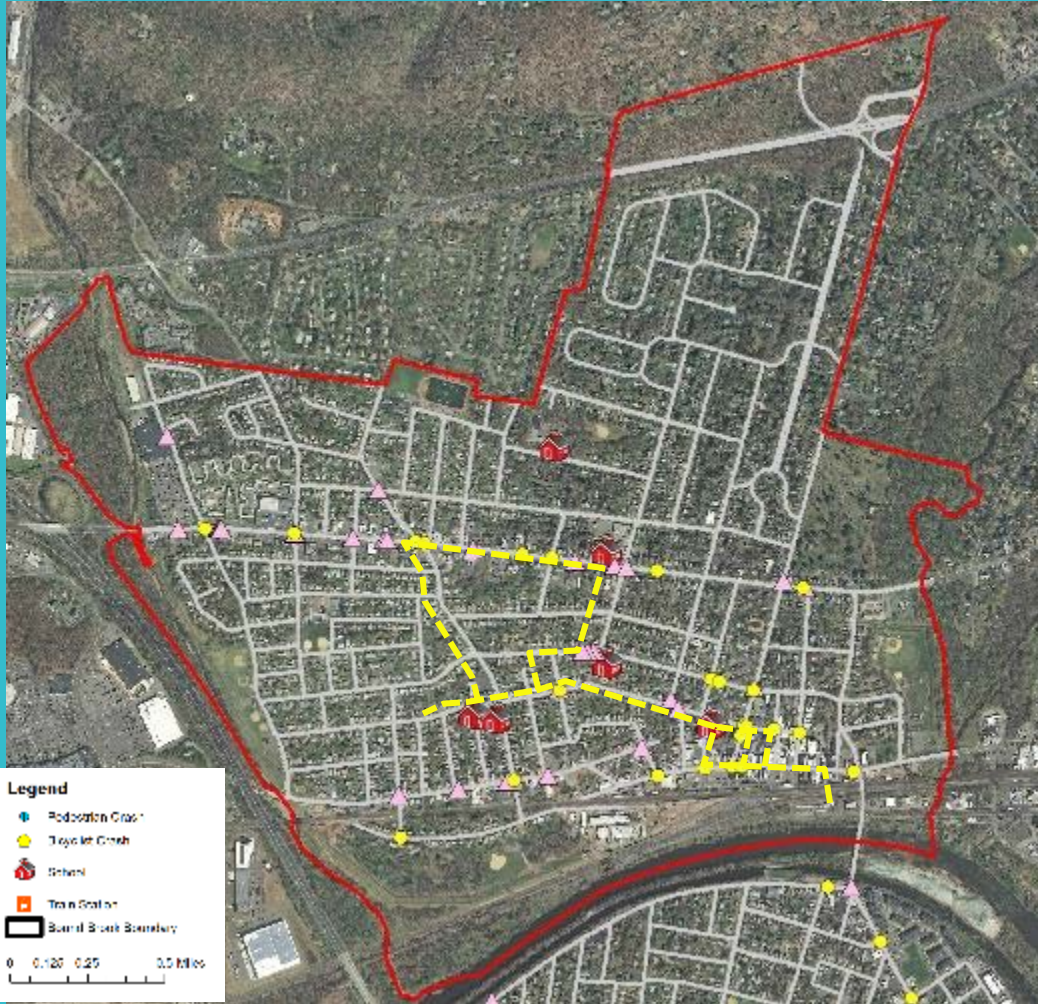


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Route Selection



Crash Type	Bound Brook
Pedestrian	35
Bicyclist	25
Total	60

Route Selection



Crash Type	South Bound Brook
Pedestrian	6
Bicyclist	5
Total	11

General Observations



Downtown, South Bound Brook



Main Street, South Bound Brook

General Observations



Memorial Park, South Bound Brook

General Observations



Lafayette School, Bound Brook



Lamonte School, Bound Brook

General Observations



Lamonte School One-Way, Bound Brook

General Observations



Utility Box at the D&R Canal, South Bound Brook



Decorated Utility Box in Raritan, NJ
Photo: RideWise, Inc

General Observations



Downtown, South Bound Brook



Lambertville, NJ

General Observations



Vossler Ave and West High St, Bound Brook



Source: NACTO Urban Street Design Guide

Bound Brook Concerns



Lamonte School, Bound Brook



New Brunswick, NJ

Bound Brook Concerns



Lafayette School, Bound Brook



Lafayette School, Bound Brook

South Bound Brook Concerns



D&R Canal Park, South Bound Brook



D&R Canal Park, South Bound Brook

South Bound Brook Concerns



D&R Canal entry points



D&R Canal entry points

Common Concerns



Main Street, South Bound Brook



Main Street, South Bound Brook

Common Concerns



W 2nd St Between Church St and Fairview Avenue,
Bound Brook



John Street, Bound Brook

Common Concerns



Bumpy pads near Lafayette Elementary School,
Bound Brook



Bumpy pads near Robert Morris School, South Bound Brook

Common Concerns



Intersection of W 2nd St and Fairview Avenue, Bound Brook



Main Street, Bound Brook

Key Intersections

PRIORITY AREAS FOR IMPROVEMENT



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General Recommendations

- ADA compliance
- Bike infrastructure
- Decreasing curb radii
- Daylighting crosswalks
- High visibility crosswalks
- Traffic calming measures



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ADA Compliance



Photo: NJ Safe Routes to School Resource Center

ADA Truncated Domes a.k.a. bumpy pads

ADA Compliance



Improper Placement/Obstructions

ADA Compliance



Photo: NJ Safe Routes to School Resource Center



ADA push buttons/Countdown signals/Increased crossing time

Tool: Pedestrian Refuge Island



Photo: NJ Safe Routes
to School Resource Center

Bike Infrastructure



Bike Racks

Bike Infrastructure

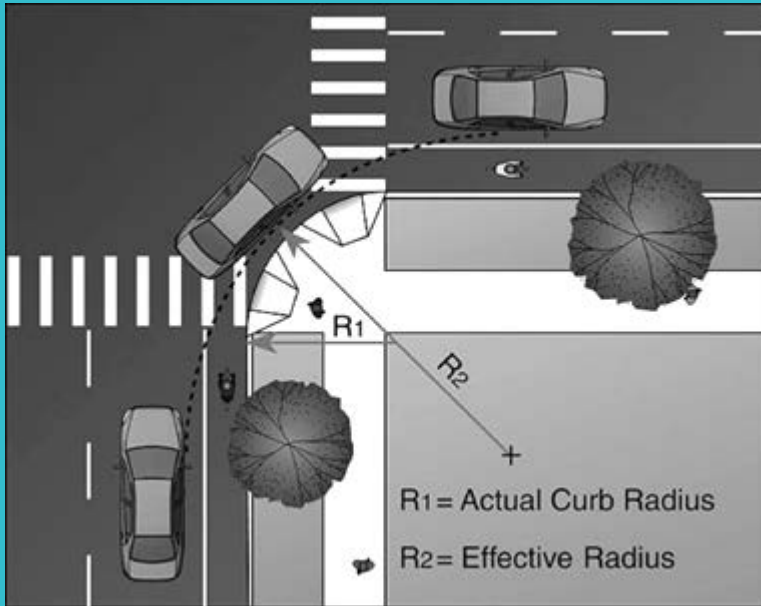


Sharrows



Bike Lane

Decreasing Curb Radii

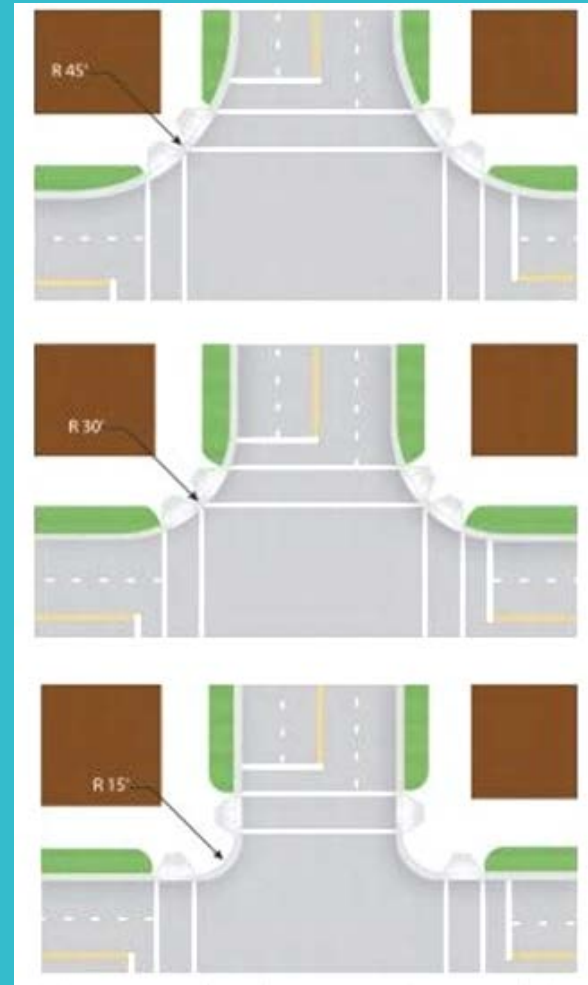


Source: Pedestrian Safety Guide and Countermeasure Selection System

R 45°

R 30°

R 15°



Undesirable



Preferred

Credit: Michele Weisbart

Daylighting



Photo: NJ Safe Routes to School Resource Center

Curb Extensions

Daylighting



Photo: NJ Safe Routes to School Resource Center

Flexible Bollards

Daylighting



Bike Corral

High Visibility Crosswalks



Low



**Hig
h**

Traffic Calming Measures



Lane Narrowing

Traffic Calming Measures



Lane Narrowing

Traffic Calming Measures



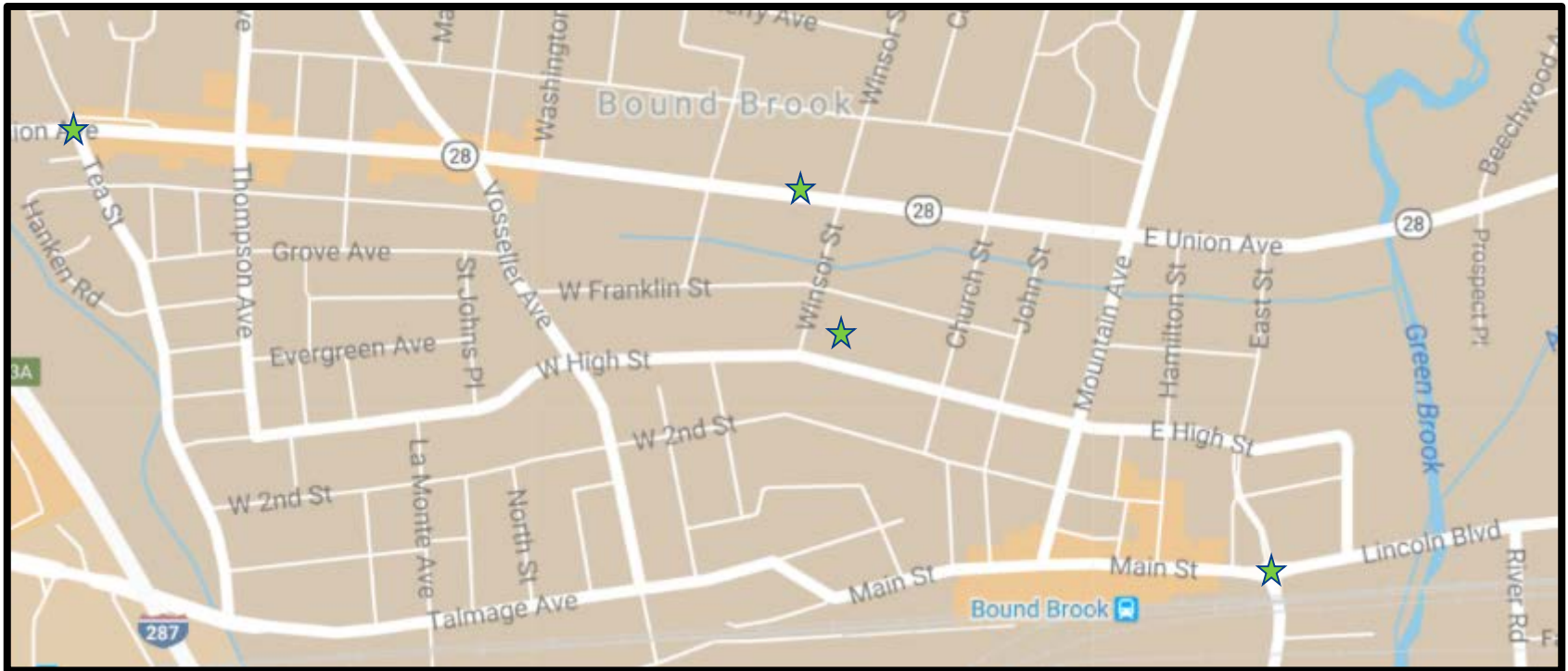
Road Diet

Traffic Calming Measures



Road Diet

Bound Brook



NJ-28 and Tea Street



NJ-28 and Tea Street



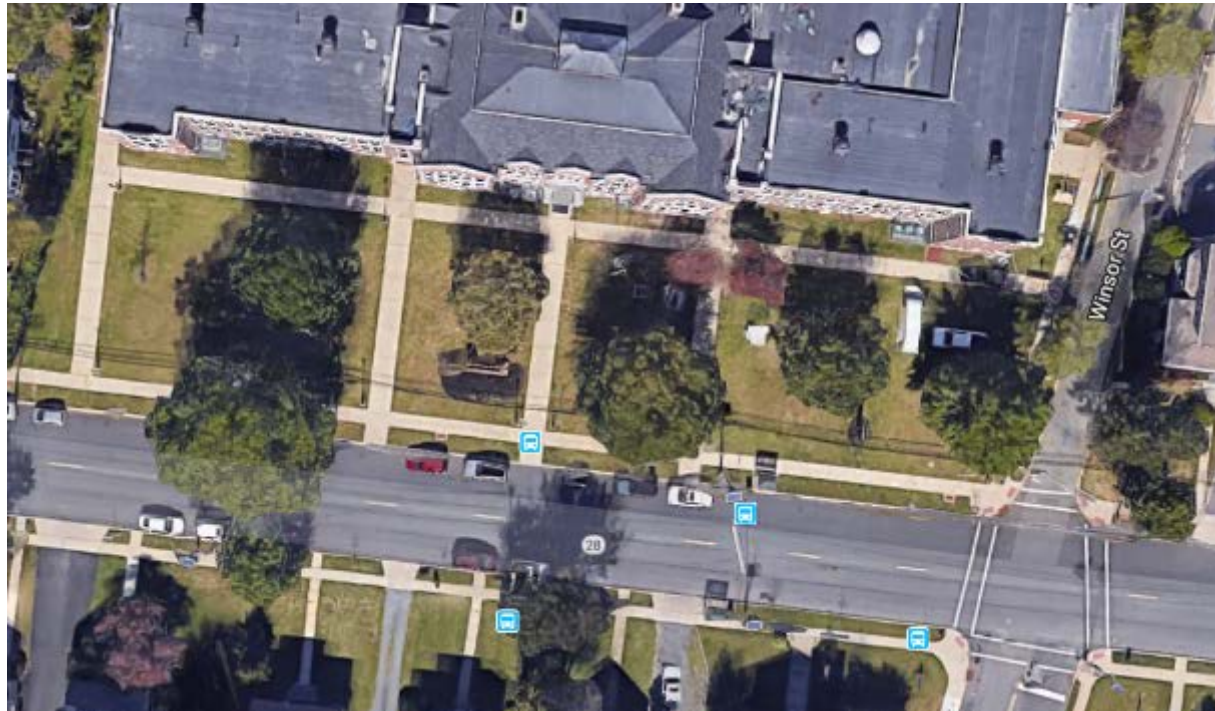
NJ-28 and Tea Street



NJ-28 and Tea Street



NJ-28 at B.B. High School



NJ-28 at B.B. High School



Recommendation



Photo: NJ Safe Routes to School Resource Center

NJ-28 at B.B. High School



2nd Street behind Lafayette



**Lafayette
Elementary School**



2nd Street behind Lafayette



2nd Street behind Lafayette





EMERGENCY USE ONLY

Roundabout



Roundabout



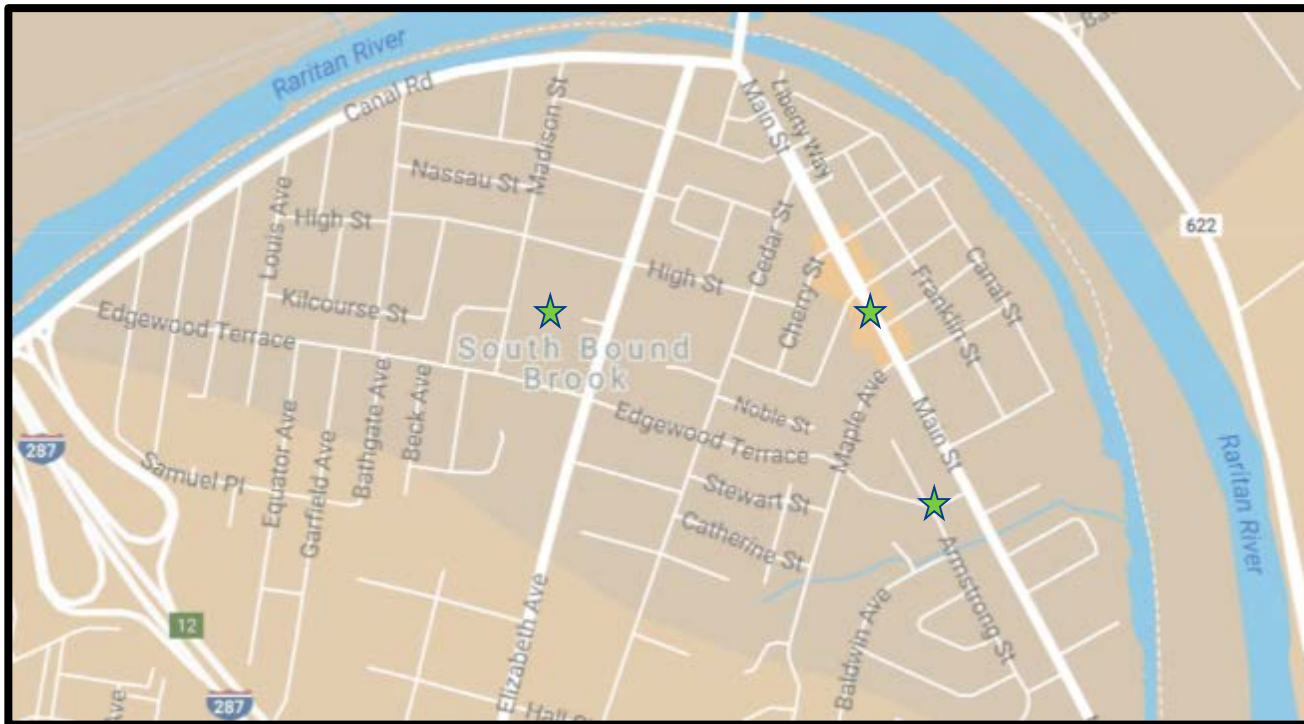
Roundabout



Recommendation



South Bound Brook



Main Street Corridor



Main Street Corridor



Main Street Corridor



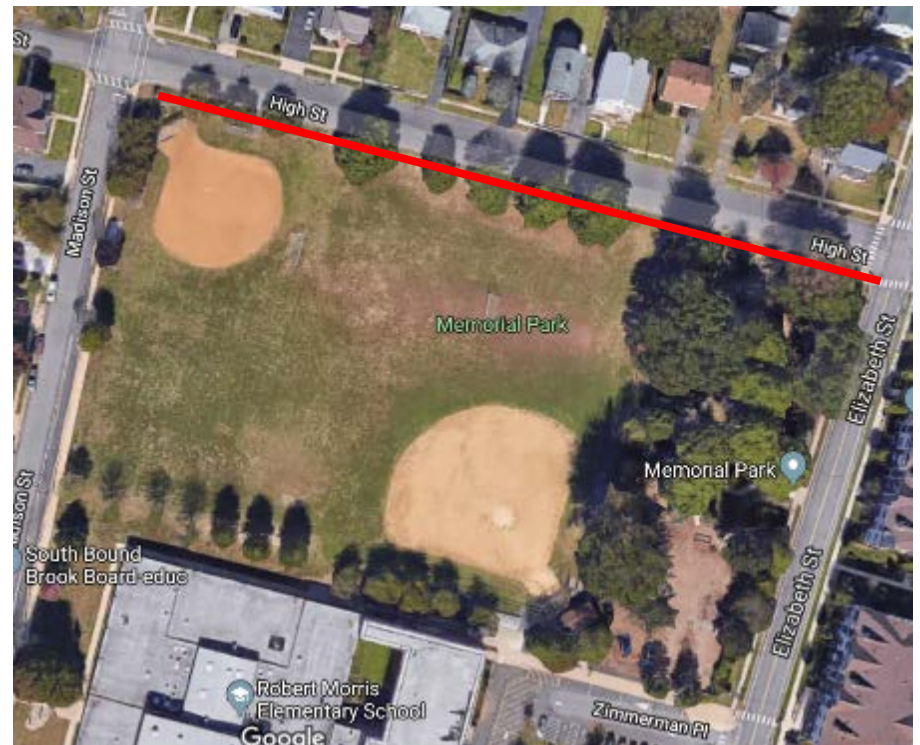
Main Street Corridor



Robert Morris School



Memorial Park



Edgewood Terrace and Armstrong Street



Placemaking & Public Input



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Outdoor Seating - Highland Park, NJ



Parklet - Princeton, NJ



Parklet - Princeton, NJ



Parklet - Princeton, NJ



Pop-Up Parklet - Morristown, NJ



Pop-Up Parklet - Trenton, NJ



Street Fair - Millburn, NJ



Street Quilt - Montclair, NJ



Street Closure - Somerville, NJ



Yarn It Project - Glassboro, NJ



Yarn It Project - Glassboro, NJ



Yarn It Project - Glassboro, NJ



Tactical Urbanism



Power of 10+



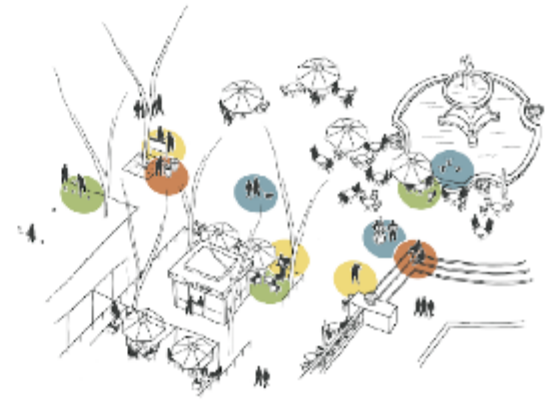
City/Region

10+ MAJOR DESTINATIONS



Destination

10+ PLACES IN EACH



Place

10+ THINGS TO DO,
LAYERED TO CREATE SYNERGY

Power of 10+: Bound Brook



Best



Most Potential

Main Street Corridor - Bound Brook



Officer Sam Kriney Memorial Park - Bound Brook



Queens Bridge - Bound Brook



Codrington Park - Bound Brook



Public Library - Bound Brook



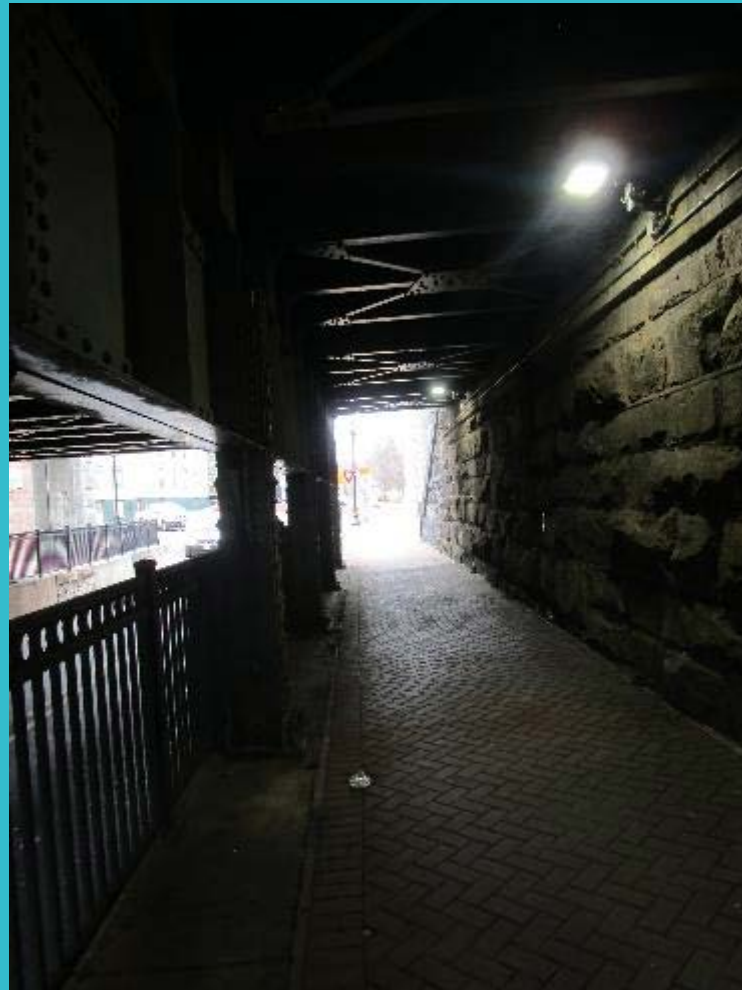
Train Station - Bound Brook



Traffic Circle - Bound Brook



Railroad Underpass - Bound Brook



Bound Brook High School



Bound Brook High School



Power of 10+: South Bound Brook



Best



Most Potential

Memorial Park - South Bound Brook



Main Street - South Bound Brook



D&R Canal State Park - South Bound Brook



Queens Bridge - South Bound Brook



Hi-Tams Ice Cream - South Bound Brook



Trail behind Canal Walk - South Bound Brook



Abraham Staats House



Abraham Staats House



Abraham Staats House



Public Input: Middle Earth

Bound Brook High School

- Bus shelter improvements
- Bike rack

Raritan River Access

- Environmental clean up
- Seating area
- Kayak access



Public Input: Middle Earth

Public Programming

- Hamilton Street, Bound Brook
- Memorial Park, South Bound Brook

Areas for Improvement

- Downtown Bound Brook
- Edgewood Terrace, South Bound Brook



Implementation



POLICY ACTIONS AND MOVING FORWARD

**How to move forward to a more bike/ped friendly community
in approachable steps.**



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The 5 Es of Bike/Ped



What are the 5 Es?

1. Education
2. Encouragement
3. Engineering
(and green engineering)
4. Evaluation
5. Enforcement



Middle Earth students brainstorm engineering ideas



Quantifying the Es

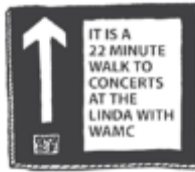
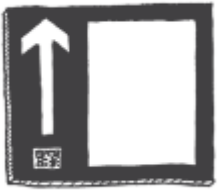


Costs

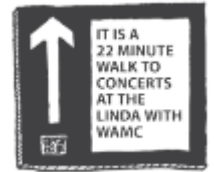
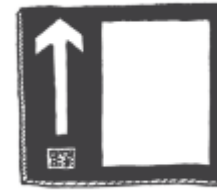
- **Low Cost**
 - \$2,000
- **Medium Cost**
 - \$2,000-\$ 10,000
- **High Cost**
 - > \$10,000

Timeframes

- **Short-term**
 - 6 months to a year
- **Medium-term**
 - 1-5 years
- **Long-term**
 - 5+ years



Education

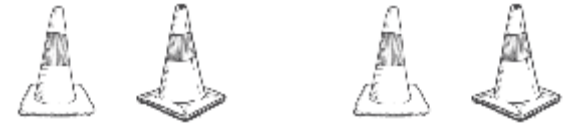


NJ students practice street crossing
Photo: RideWise

- On-bike education
- Short-term
- Low-cost (<2k-with grant)
- Partner with RideWise and the local police



Enforcement



- Enforce anti-idling laws in school zones
- Local ordinance?
- Partner with police
- Short term & ongoing
- Variable/low cost (<2k)



Officer joins NJ children walking to school

Photo: HART TMA



Encouragement



- Low cost (<2k)
- Short term
- Student bike/ped chalk murals
- Partnership with student and senior clubs
- Tactical Urbanism Guide



Florida students use temporary spray chalk to decorate street

Photo: Tactical Urbanism Guide



Engineering



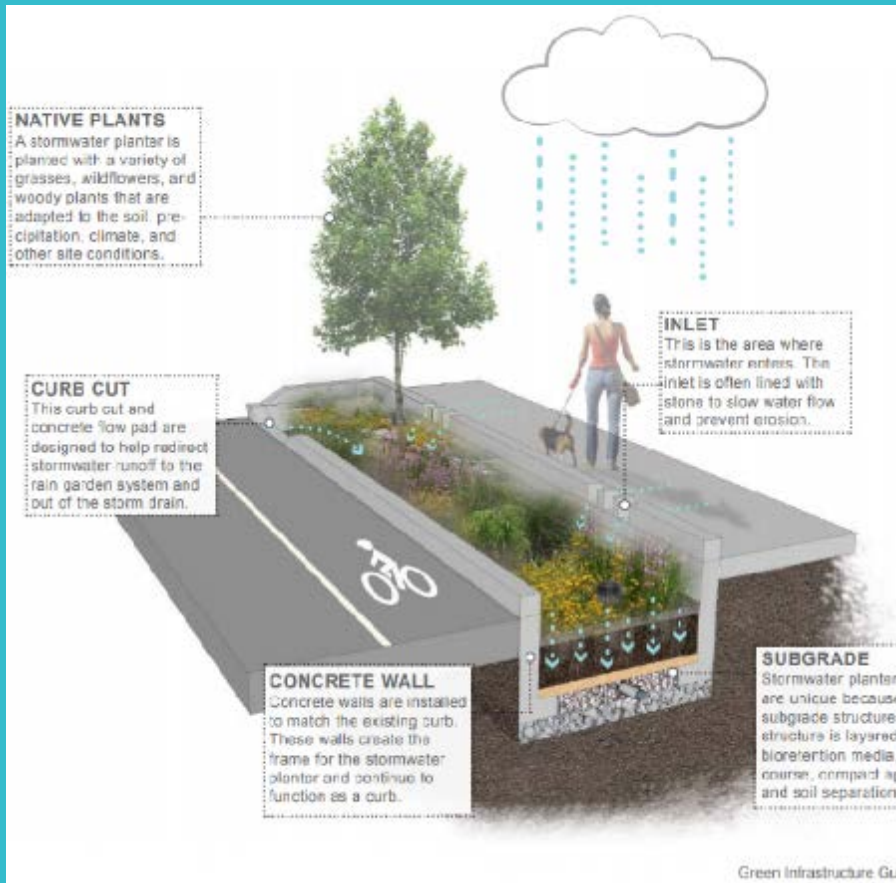
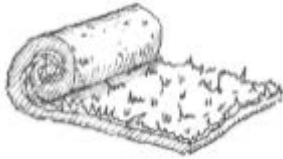
- Daylight key crosswalks
- Medium cost
- Medium-term



Bumpouts and daylight crosswalks

Photo: Tactical Urbanism Guide

Green Engineering



- Trees in drained bioswale along SBB main street corridor
- High cost >10k
- Long term
- Possible DEP funding

Bioswale with tree pit

Source: Rutgers Green Infrastructure Guide



Evaluation



Walk audit in New Brunswick

- Periodic bike/walk assessment
- Variable term
- Partner with RideWise and/or with local citizens

Funding & Resources



FEDERAL, STATE & OTHER FUNDING



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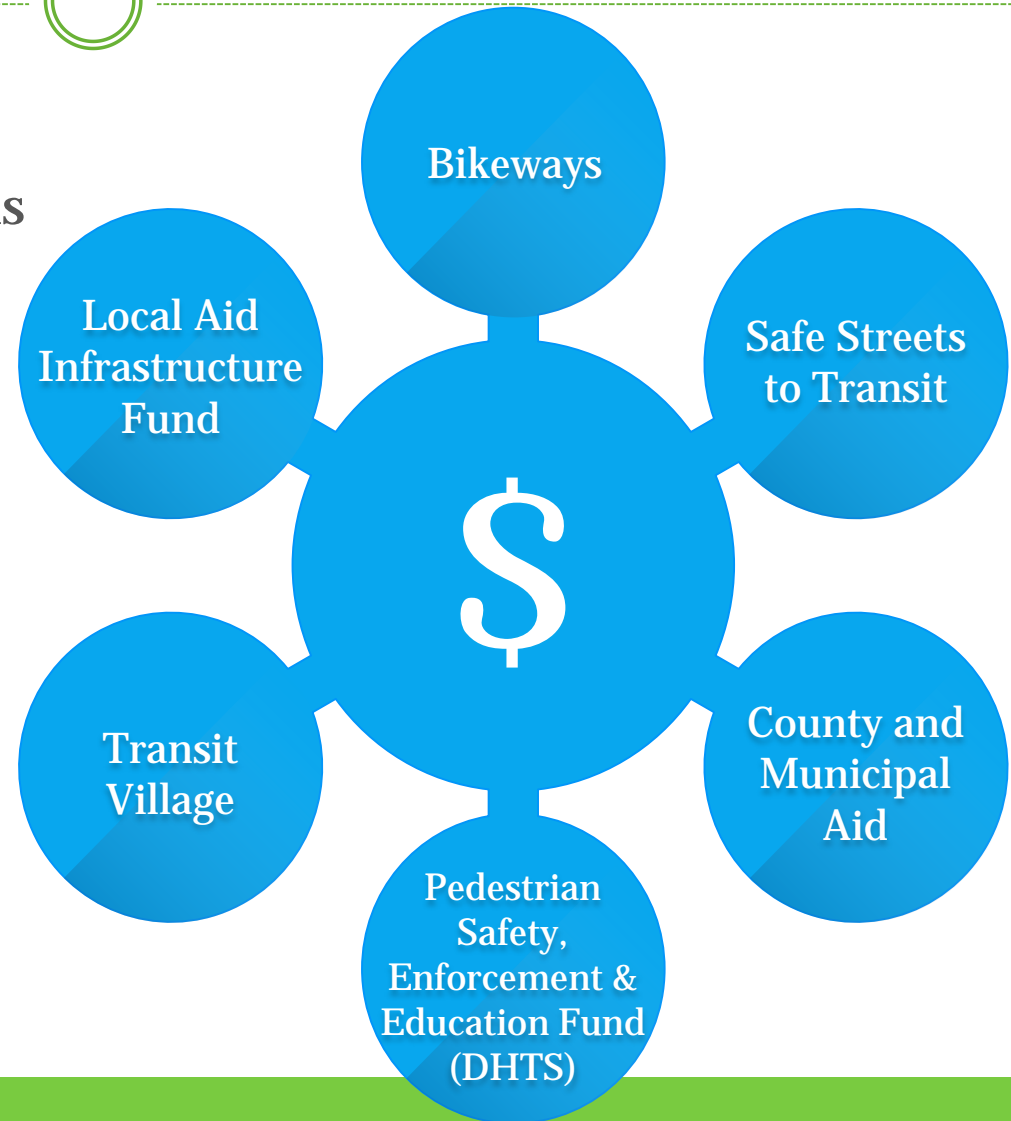


Funding Opportunities



State Funded Programs:

- + Extra point given to towns with a Complete Streets policy

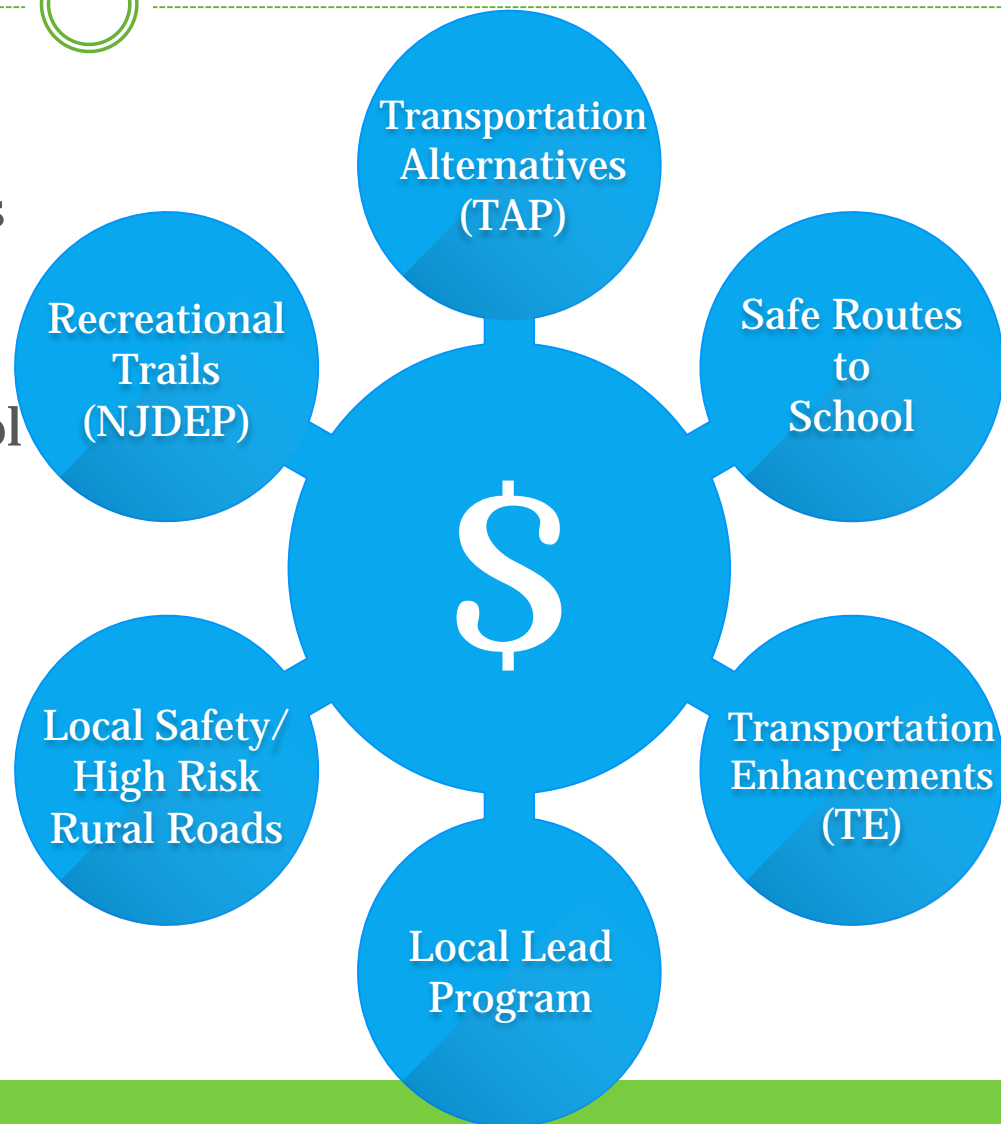


Funding Opportunities



Federally Funded Programs:

- + Extra point given to towns with a Complete Streets policy
- + Extra point given to School District with supportive Walk/Bike to School or School Wellness Policies



Funding Opportunities



Stormwater Management - Washington St. Hoboken

Green infrastructure to capture stormwater runoff: 19 bioswales in pedestrian curb extensions on Washington Street and First Street & expanded street tree pits funded through NJDEP & DHTS



Funding Opportunities



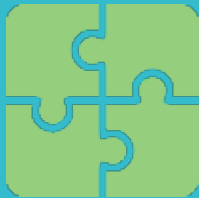
NJ Health & Environment Funded Programs:



Grant Writing Tips



| Who should be involved?



| What are the priority issues?



| How can you show the problem(s)?

Resources



www.saferoutesnj.org/resources/funding



NEW JERSEY
Safe Routes to School



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Check out our videos!

Resources / Funding/ Grants

Funding/ Grants

Twitter

Funding for Safe Routes and Bicycle and Pedestrian Projects



The New Jersey Department of Transportation (NJDOT) is committed to advancing projects that enhance safety, renew the aging infrastructure, improve pedestrian and bicycle infrastructure and supporting new and alternative transportation opportunities. The Transportation Trust Fund (TTF) provides the opportunity for State assistance to local governments for the funding of road, bridge and other transportation projects. Annually, the TTF provides State Aid to municipalities and counties for local transportation improvements. In addition, several programs which provide funding to counties and municipalities for transportation projects are funded with federal funds.

STATE FUNDED PROGRAMS:

NJDOT provides state-aid grants to counties and municipalities for traditional and non-traditional transportation initiatives. State-Funded grant programs include:

- **Municipal Aid:** This program assists municipalities in funding local transportation projects, and all municipalities in New Jersey are eligible to apply. NJDOT specifically encourages applications for pedestrian safety improvements, bikeways, and streetscapes, hoping to award 10% of all Municipal Aid funds for these projects specifically.
- **Transit Village:** This program awards grants for transportation projects that enhance walking, biking, and/or transit ridership within ½ mile of the transit facility. Municipalities must already be designated as Transit Villages by the Commissioner of Transportation and the Inter-agency Transit Village Task Force in order to apply.
- **Bikeways:** This program funds bicycle projects that create new bike path mileage, working towards NJDOT's goal of 1,000 miles of dedicated bikeways in New Jersey. Special consideration will be given to bikeways physically separated from vehicle traffic, but on-road bike lanes or other bike routes are also eligible for funding.
- **Safe Streets to Transit:** This program encourages counties and municipalities to construct safe and accessible pedestrian linkages to transit facilities, in order to promote increased usage of transit by all segments of the population.

Thank You!



Next Steps



- Kristiana Barr
- Li-Yan Chang
- Rachel Fifield
- Riddhi Parikh
- Jill Walsh